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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CHAITANYA KANOJIA and TERRI SWARTZ

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Appeal 2009-006354  
Application 09/873,785<sup>1</sup>  
Technology Center 2400

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Before KENNETH W. HAIRSTON, JOHN C. MARTIN,  
and MARC S. HOFF, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>2</sup>

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<sup>1</sup> The real party in interest is NAVIC Systems, Inc.

<sup>2</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

## STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1-30, 32-63, and 65-71. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellants' invention relates to a system for displaying promotions on a viewing device associated with a network device. The system includes a display and a selector which when triggered causes a promotion to be shown on the display which may cover all or a portion of the viewing area of the display. Hence, multiple promotions may be displayed simultaneously. User interaction with the network device (e.g. when the person changes channels or channel surfs) may trigger the selector. In the alternative, a trigger may be embedded in the broadcast stream. (Abstract).

Claim 1 is exemplary:

1. A system for displaying promotions on a viewing device comprising: a display which is viewable by a viewer using the viewing device; and a network device coupled to the viewing device, the network device configured to:

(a) receive a promotion and a transmission schedule wherein the transmission schedule contains control data that specifies a condition for activating the promotion for display in the display and the transmission schedule is received as a message which is individually addressed to the network device, and

(b) in response to the condition occurring, activate the promotion for display in the display.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Alexander	US 6,177,931 B1	Jan. 23, 2001
Sahota	US 2002/0010928 A1	Jan. 24, 2002
Eldering	US 6,615,039	Sep. 2, 2003

Claims 1-30, 32-63, and 65-71<sup>3</sup> stand rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Sahota and Eldering.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Appeal Brief (filed October 19, 2007), the Reply Brief (filed March 28, 2008), and the Examiner's Answer (mailed January 25, 2008) for their respective details.

### ISSUES

Appellants contend that Eldering discloses multicasting wherein a group or a subgroup is addressed but the claim limitation requires a message to be sent to a single network device and the Specification requires unicast transmission of the scheduling message (App. Br. 5-6, and 8-10; Spec. 10:28-11:5).

The Examiner finds that it would have been obvious to include the ATVEF or VBI triggers disclosed in Sahota with the transmission schedule messaging protocol (unicast) for advertising disclosed in Eldering in order to deliver data programming and video services as well as advertisements to each network device by using its own unique ID (Ans. 19-20).

Appellants' contentions and the Examiner's findings present us with the following issues:

1. Does the combination of the teachings from Alexander, Sahota, and Eldering disclose "a transmission schedule received as a message which is individually addressed to a network device" (Ans. 19; Br. 7)?

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<sup>3</sup> Claims 68-71 are not cited in the statement of the rejection; however the Examiner has set forth reasoning for the rejected claims (Ans. 17-18).

2. Does the combination of the teachings from Alexander, Sahota, and Eldering disclose or suggest control data carried in a schedule message to activate a promotion (Br. 10)?

### FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

#### *The Invention*

1. According to Appellants, the invention relates to a system for displaying promotions on a viewing device associated with a network device. The system includes a display and a selector which when triggered causes a promotion to be shown on the display which may cover all or a portion of the viewing area of the display. Hence, multiple promotions may be displayed simultaneously. User interaction with the network device (e.g. when the person changes channels or channel surfs) may trigger the selector. In the alternative, a trigger may be embedded in the broadcast stream. (Abstract).

2. Advertising promotions are activated at the network device (set-top box) as specified in the promotion control data sent in the transmission schedule message. Promotion activation may be event, time, or channel driven. In the alternative, triggers may be embedded in broadcast streams such as Advanced Television Enhancement Forum (ATVEF), Vertical Blanking Interval (VBI), or in Moving Pictures Experts Group (MPEG) data streams (Spec. 8:3-10).

3. The system includes a promotion agent 310 that logs the view activities over a period of time and sends this viewer information in the form of a message to Life Cycle Manager Server 250, wherein the message is sent using a messaging protocol for unicast transmission. Viewer behavior data is mapped to the program schedule 260 and matched with group profiles 270 provided by third party advertisers. A viewership profile is generated by determining within the Life Cycle Manager Server 250 a class of the viewer corresponding to viewer behavior data and the group profiles and the resultant viewership profile is stored in a database 210. (Spec. 8:11-9:27).

4. Promotions are scheduled for delivery to specific promotion groups, wherein a promotion manager server 220 uses the viewership profile to package the promotion for delivery and stores it in database 210. The promotion manager server 220 uses the package information to generate transmission schedules that specify when and how each of the network devices associated with a promotion group is to receive the promotion. The transmission schedule is sent to a promotion agent 310 within the network device, while the bulk manager agent 320 within the network device delivers each promotion identified in the transmission schedule. (Spec. 7:8-24).

*Alexander*

5. Alexander discloses an on-screen electronic program guide (EPG) having improved opportunities for the commercial advertiser to reach the viewer, wherein two advertisement (Ad) windows are displayed adjacent to a grid guide of program listings (Fig. 1; col. 3, ll. 1-19). Viewer profile information including data collected representing viewer interaction and other simple statistics about the viewer can be sent to a computer at the head end of the television distribution for analysis (col. 29, ll. 13-20). A Profile

Program uses the viewer profile information to tailor the presentation and scheduling of advertisements to the viewer within the Ad windows (col. 32, ll. 23-27). Additionally the viewer profile information may be used to customize presentation and scheduling of telecast advertisements that are viewable during the real-time telecast of the television program that the viewer is watching (col. 32, ll. 35-39).

6. Alexander discloses that telecast advertisements such as an overlay message to an advertisement on a local geographic basis can be displayed during the real-time telecast of a television program, wherein the customized messages are preloaded based upon zip code into the memories of particular viewers' EPG's. These preloaded messages can be transmitted by a head end during off hours and stored in the viewer's terminal for use when the advertisement runs. The electronic trigger to run the message can be transmitted along with the television signal in real time (col. 32, ll. 35-54).

7. Alexander discloses an embodiment wherein customization of real-time viewing of advertisements is implemented by providing multiple channels of advertising, wherein the television is automatically tuned to a particular advertising channel at the time when a general advertisement is scheduled to occur during the telecast of a television program. The television is tuned back to the television program at the conclusion of the advertisement. In the alternative, a service may monitor the telecast for advertisements and insert a change channel command in the Vertical Blanking Interval (VBI) which tunes the television to a particular channel to display the advertisement (col. 32, l. 61-col.33, l.8).

*Sahota*

8. Sahota discloses an integration platform architecture for integrating Internet advertising content with television commercials that transmits video programming to the set-top box of a subscriber, wherein the architecture includes a broadcasting server 260 that stores advertising content and TV commercial content in advance in broadcast database 265. Broadcasting server 260 couples to multiplexer/encoder 215 which provides ATVEF, VBI encoding, MPEG multiplexing, or IP encapsulation services to insert the data media and content into a video broadcast stream such as a TV commercial. Broadcasting server 260 stores scheduling and asset information in the broadcast database 265 for determining timing and scheduling of the broadcasted integrated content. One example discloses that broadcasting server 260 may send the TV commercial content with an ATVEF trigger and advertising content to the multiplexer/encoder 215 that uses the ATVEF trigger to integrate the Internet advertising content with the TV commercial content (¶¶ [0046-48]).

*Eldering*

9. Eldering discloses a targeted advertising system that inserts advertisements into digital video programming streams based upon shared subscriber characteristics. Subgroups for advertising are generated by creating multiple lists or tables of subscribers. Each subgroup may comprise a group of subscribers, a group of households, an individual subscriber or a single household (col. 1, ll. 6-10).

10. Eldering discloses that the advertising stream may be multicast to a subgroup or unicast to a singular subscriber, wherein individual



advertisements are delivered directly to the subscriber along with the individually selected programming (col. 11, ll. 36-60).

11. Eldering discloses that an advertisement stream may be sent to a Cable Modem Termination System (CMTS) to relay the stream to set-top boxes, wherein the advertisement stream is sent to the IP address of a multicast group or a unicast address (col. 6, ll. 53-62).

### PRINCIPLES OF LAW

On the issue of obviousness, the Supreme Court has stated that “the obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). Further, the Court stated “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at 416. “One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *Id.* at 419-420.

The determination of obviousness must consider, *inter alia*, whether a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and whether there would have been a reasonable expectation of success in doing so. *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1125 (Fed. Cir. 2000).

“[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.” *In re Keller*, 642 F.2d 413, 426 (CCPA 1981).

## ANALYSIS

### *Claims 1-30, 33-63, and 65-71*

We select claim 1 as representative of this group of claims, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii).

Representative claim 1 recites a system for displaying promotions wherein the network device is configured to “receive a promotion and a transmission schedule wherein the transmission schedule contains control data that specifies a condition for activating the promotion for display in the display and the transmission schedule is received as a message which is individually addressed to the network device.”

Appellants contend that Eldering discloses multicasting a transmission schedule wherein a group or a subgroup is addressed, but does not meet the language of claim 1, which requires a message to be sent to a single network device and the Specification requires unicast transmission of the transmission schedule (App. Br. 5-6 and 8-10). Appellants contend that there is no motivation to combine the references since there would be no need for the ATVEF triggers to specify a further cause (condition) when the enhanced content should or should not be integrated with the content (App. Br. 6-7, 12). Appellants contend that the ATVEF triggers of Sahota do not originate as a message containing control data (App. Br. 11).

The Examiner finds that Alexander discloses a computer system that analyzes and provides promotion or advertisements corresponding to the user’s profile or preference, wherein the promotion is not activated to be displayed until a transmission schedule comprising control data that triggers or activates the promotion arrives at the network device (Ans. 5). The Examiner finds that it would have been obvious to include the ATVEF or

VBI triggers disclosed in Sahota with the transmission schedule messaging protocol (multicast and *unicast*) for advertising disclosed in Eldering in order to deliver data programming and video services as well as advertisements to each network device by using its own unique ID (Ans. 6, 19-20 (emphasis added)).

We agree with the Examiner's finding that it would have been obvious to one of ordinary skill in the art to modify Alexander's system with the control data triggers disclosed in Sahota and the technique of unicasting disclosed in Eldering to arrive at the claimed invention. Specifically, Alexander discloses an EPG that displays advertisements in Ad windows adjacent to a grid guide of program listings based upon a viewer profile representing data collected of viewer interaction (FF 5). Alexander also discloses that an overlay message (one that is substituted for regular advertising) may be preloaded on the viewer's terminal (set-top box) and run in response to an electronic trigger (FF 6). Further, Alexander discloses that customization of real-time viewing of advertisements may occur through the use of triggers that change the channel to one of a number of multiple advertising channels based upon a trigger sent in the VBI (FF 7). Moreover, Sahota discloses the use of electronic triggers to initiate advertising within the set-top box of a subscriber, including ATVEF, VBI encoding, MPEG multiplexing, and IP encapsulation (FF 8). Finally, Eldering discloses that the advertising stream may be *unicast* to a single subscriber (FF 9 and 10) using an IP address that represents a *unicast* address (FF 11). Appellants responded to the Examiner's reliance on Eldering's "unicast" disclosure (Ans. 19) by arguing that "Eldering does not separate targeting the

promotion from delivering the promotion as recited in Appellant's claim 1" (Reply Br. 5).

Although the Specification discloses that the viewer activities are sent in the form of messages from the Promotion Agent 310 to Life Cycle Manager Server 250, the Specification is *silent* as to how the transmission schedule messages must be sent from the Promotion Manager Server 220 to the Promotion Agent 310 within the network device (FF 3-4). We agree with Appellants that the claim language does require that a transmission schedule be individually addressed to each network device (App. Br. 5-6). However, we also agree with the Examiner's finding that Eldering discloses *unicasting* individual advertisements directly to a subscriber along with individually selected programming (Ans. 19, FF 10 (emphasis added)). Hence, Eldering discloses that individual advertisements along with scheduling are *unicast* to the network device.

We also agree with the Examiner's finding that a promotion can be activated using ATVEF triggers (Ans. 20). The Specification discloses that once promotions have been successfully delivered, the promotions are activated by either an event, time, channel or trigger such as an ATVEF trigger (FF 2). As noted *supra*, Sahota discloses the use of electronic triggers to initiate advertising within the set-top box of a subscriber, including ATVEF, VBI encoding, MPEG multiplexing, and IP encapsulation (FF 8). Also, the trigger can include data that specifies a condition for activating a promotion for display. *See* Sahota ¶ [0037] ("[T]he trigger may include readable description of content such as, for example, 'press the browse button for more information about the product being advertised,' which can be displayed on TV 104 by set-top box 106.").

Accordingly, we agree with the Examiner's conclusion that the combination of the teachings from Alexander, Sahota, and Eldering disclose "a transmission schedule received as a message which is individually addressed to a network device" (Ans. 19) and control data carried in a schedule message to activate a promotion (Ans. 20).

We therefore find no error in the Examiner's rejection of claims 1-30, 33-63, and 65-71 under 35 U.S.C. § 103.

#### CONCLUSIONS OF LAW

The combined disclosures of Alexander, Sahota, and Eldering disclose "a transmission schedule received as a message which is individually addressed to a network device" (Ans. 19).

#### ORDER

The Examiner's rejection of claims 1-30, 33-63, and 65-71 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

ELD

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